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10/747,815	12/29/2003	Toru Takahashi	9319M-000620	1896

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EXAMINER	
TURNER, ASHLEY D	
ART UNIT	PAPER NUMBER
2454	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/747,815	TAKAHASHI ET AL.	
	Examiner	Art Unit	
	ASHLEY D. TURNER	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 11-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 11-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/6/2004,5/14/2004,3/30/2006,4/15/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The metes and bounds of the claim are unclear since no structure is defined in the body of the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 3,4,5,6 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Natalini (US 2002/0095269 A1) in view of Terada (US 6,167,046) further in view of Dulberg (US 2007/0100585 A1) further in view of Slemmer (US 6,889,207 B2).

As per claim 1, Natalini discloses a device monitoring system connected with a plurality of devices via a network (Pg.2 [0023]), Natalini did not disclose "at least some of the plurality of devices are provided with a device monitoring function for: monitoring each other for changes in state; notifying each other of the changes in state; and sharing with each other information about

the changes in the state". The general concept of having "at least some of the plurality of devices are provided with a device monitoring function for: monitoring each other for changes in state; notifying each other of the changes in state; and sharing with each other information about the changes in the state" is well known in the art as taught by Terada. Terada discloses at least some of the plurality of devices are provided with a device monitoring e.g. (Col. 25 lines 26-34 Busy cancellation determination section 28 determines whether or not the busy state is canceled, based on busy cancellation data BR applied from function implementing unit 39 through I/F 95. CPU 91 in function implementing unit 39 monitors the state if function section 98 and when it determines that the busy state is canceled) function for: monitoring e.g. (control command) [Fig. 4D] each other for changes in state notifying each other of the changes in state; and sharing with each other information about the changes in state. (Col. 11 lines 29-37 Fig. 1 has a communication control unit 38 for communication with other electrical appliances or equipments through communication path 37 to control other equipments and to be controlled by other equipments.) and (Col. 23 lines 42-50 when a control packet is received in each equipment and it is determined that the equipment is in the busy state(Fig. 8B), a busy packet storing the busy factor 32A is transmitted. Therefore, it can be readily determined by the equipment on the controlling side whether the equipment to be controlled does not have the desired function or the equipment to be controlled cannot perform the desired function simply because it is busy. Further the controlling equipment receives busy factor 32 A, and therefore it can recognize why the desired function cannot be executed). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include "at least some of the plurality of devices are provided with a device monitoring function for: monitoring each other for changes in

state; notifying each other of the changes in state; and sharing with each other information about the changes in the state" in order to have multiple centralized managing equipments.

Natalini did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. (Paragraph [0042] The log may be organized and/or accessible in various ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors prior to a failure, during a repair process and after a repair process. The data for the log may be, for example, periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved

from a lower level member of said hierarchy. Alternatively or additionally, said data was previously retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Natalini and Dulberg did not disclose appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. Slemmer discloses appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. (FIG. 9 shows an alternative method of learning where the first device to have a change of state learns the interaction rule. The logical operations begin at detect operation 902 where a first device detects its own change of state. In response to the change of state, the first device then begins monitoring for incoming state change messages at monitor operation 904. Subsequently, a second device receives a change of state at detect operation 906 and broadcasts the change of state message to all devices at broadcast operation 908. The broadcast is effectively a request that any device previously experiencing a state change add the second device to its subscriber list.) It would have been obvious to one

of ordinary skill in the art at the time of the invention to modify Natalini in order to include appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device to provide in order to provide the unique function of the devices.

As per claim 2, Natalini discloses all the limitations of claim 2 which is described above. Natalini also discloses a device monitoring system connected with a plurality of devices via a network (Pg.2 [0023]). Natalini did not disclose, "each of the plurality of devices is provided with a device monitoring function for monitoring each other for an abnormality; notifying each other of the abnormality; and sharing with each other information about the abnormality." The general concept of "each of the plurality of devices is provided with a device monitoring function for monitoring each other for an abnormality; notifying each other of the abnormality; and sharing with each other information about the abnormality." is well known in the art as taught by Terada. Terada discloses, "each of the plurality of devices is provided with a device monitoring e.g. (Col. 25 lines 26-34 Busy cancellation determination section 28 determines whether or not the busy state is canceled, based on busy cancellation data BR applied from function implementing unit 39 through I/F 95. CPU 91 in function implementing unit 39 monitors the state if function section 98 and when it determines that the busy state is canceled) function for monitoring e.g. (control command) [Fig. 4D] each other for an abnormality;

notifying each other of the abnormality; and sharing with each other information about the abnormality. (Col. 11 lines 29-37 Fig. 1 has a communication control unit 38 for communication with other electrical appliances or equipments through communication path 37 to control other equipments and to be controlled by other equipments.) and (Col. 23 lines 42-50 when a control packet is received in each equipment and it is determined that the equipment is in the busy state (Fig. 8B), a busy packet storing the busy factor 32A is transmitted. Therefore, it can be readily determined by the equipment on the controlling side whether the equipment to be controlled does not have the desired function or the equipment to be controlled cannot perform the desired function simply because it is busy. Further the controlling equipment receives busy factor 32 A, and therefore it can recognize why the desired function cannot be executed). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include "each of the plurality of devices is provided with a device monitoring function for monitoring each other for an abnormality; notifying each other of the abnormality; and sharing with each other information about the abnormality." in order to have multiple centralized managing equipments.

Natalini did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance

from among the devices on the network, creates a device management table, and distributes it to the other devices. (Paragraph [0042] The log may be organized and/or accessible in various ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors prior to a failure, during a repair process and after a repair process. The data for the log may be, for example, periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved from a lower level member of said hierarchy. Alternatively or additionally, said data was previously retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Natalini and Dulberg did not disclose appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. Slemmer discloses appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. (FIG. 9 shows an alternative method of learning where the first device to have a change of state learns the interaction rule. The logical operations begin at detect operation 902 where a first device detects its own change of state. In response to the change of state, the first device then begins monitoring for incoming state change messages at monitor operation 904. Subsequently, a second device receives a change of state at detect operation 906 and broadcasts the change of state message to all devices at broadcast operation 908. The broadcast is effectively a request that any device previously experiencing a state change add the second device to its subscriber list.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini in order to include appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device to provide in order to provide the unique function of the devices.

As per claim 3 Natalini discloses all the limitations of claim 3 which is described above. Natalini also discloses a device monitoring system comprising a plurality of devices connected to a network and a device management server i.e. remote center 50, which manages the plurality of devices (Pg.2 [0025). Natalini did not disclose "each of the plurality of devices is provided with a device monitoring function for monitoring each other for changes in state; notifying at least one of the device management server and other devices among the plurality of devices of the changes in state; sharing with each other information about the changes in state." The general concept of"each of the plurality of devices is provided with a device monitoring function for monitoring each other for changes in state; notifying at least one of the device management server and other devices among the plurality of devices of the changes in state; sharing with each other information about the changes in state." is well known in the art as taught by Terada. Terada discloses, "each of the plurality of devices is provided with a device monitoring e.g. (Col. 25 lines 26-34 Busy cancellation determination section 28 determines whether or not the busy state is canceled, based on busy cancellation data BR applied from function implementing unit 39 through I/F 95. CPU 91 in function implementing unit 39 monitors the state if function section 98 and when it determines that the busy state is canceled) function for monitoring e.g. (control command) [Fig. 4D] each other for changes in state; notifying at least one of the device management server and other devices among the plurality of devices and sharing with each other information about the changes in state.(Col. 11 lines 29-37 Fig. 1 has a communication control unit 38 for communication with other electrical appliances or equipments through

communication path 37 to control other equipments and to be controlled by other equipments.) and (Col. 23 lines 42-50 when a control packet is received in each equipment and it is determined that the equipment is in the busy state(Fig. 8B), a busy packet storing the busy factor 32A is transmitted. Therefore, it can be readily determined by the equipment on the controlling side whether the equipment to be controlled does not have the desired function or the equipment to be controlled cannot perform the desired function simply because it is busy. Further the controlling equipment receives busy factor 32 A, and therefore it can recognize why the desired function cannot be executed). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include "each of the plurality of devices is provided with a device monitoring function for monitoring each other for changes in state; notifying at least one of the device management server and other devices among the plurality of devices of the changes in state; sharing with each other information about the changes in state." in order to have multiple centralized managing equipments.

Natalini did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. (Paragraph [0042] The log may be organized and/or accessible in various

ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors prior to a failure, during a repair process and after a repair process. The data for the log may be, for example, periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved from a lower level member of said hierarchy. Alternatively or additionally, said data was previously retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Natalini and Dulberg did not disclose appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting

step, becoming the parent device. Slemmer discloses appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. (FIG. 9 shows an alternative method of learning where the first device to have a change of state learns the interaction rule. The logical operations begin at detect operation 902 where a first device detects its own change of state. In response to the change of state, the first device then begins monitoring for incoming state change messages at monitor operation 904. Subsequently, a second device receives a change of state at detect operation 906 and broadcasts the change of state message to all devices at broadcast operation 908. The broadcast is effectively a request that any device previously experiencing a state change add the second device to its subscriber list.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini in order to include appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device to provide in order to provide the unique function of the devices.

As per claim 4 Natalini discloses all the limitations of claim 4, which is describe above. Natalini also discloses a device monitoring system comprising a plurality of devices connected to a

network and a device management server i.e. remote center 50, which manages the plurality of devices. Natalini did not disclose "each of the plurality of devices is provided with a device monitoring function for: monitoring each other for an abnormality; notifying the device management server and other devices among the plurality of devices of the ; and sharing with each other information about the abnormality. The general concept of "each of the plurality of devices is provided with a device monitoring function for: monitoring each other for an abnormality; notifying the device management server and other devices among the plurality of devices of the ; and sharing with each other information about the abnormality. is well known in the art as taught by Terada. Terada discloses, "each of the plurality of devices is provided with a device monitoring e.g. (Col. 25 lines 26-34 Busy cancellation determination section 28 determines whether or not the busy state is canceled, based on busy cancellation data BR applied from function implementing unit 39 through I/F 95. CPU 91 in function implementing unit 39 monitors the state if function section 98 and when it determines that the busy state is canceled) function for monitoring e.g. (control command) [Fig. 4D] each other for an abnormality; notifying the device management server and other devices among the plurality of devices of the abnormality; and sharing with each other information about the abnormality." (Col. 11 lines 29-37 Fig. 1 has a communication control unit 38 for communication with other electrical appliances or equipments through communication path 37 to control other equipments and to be controlled by other equipments.) and (Col. 23 lines 42-50 when a control packet is received in each equipment and it is determined that the equipment is in the busy state (Fig. 8B), a busy packet storing the busy factor 32A is transmitted. Therefore, it can be readily determined by the equipment on the controlling side whether the equipment to be controlled does not have the

desired function or the equipment to be controlled cannot perform the desired function simply because it is busy. Further the controlling equipment receives busy factor 32 A, and therefore it can recognize why the desired function cannot be executed). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include "each of the plurality of devices is provided with a device monitoring function for: monitoring each other for an abnormality; notifying the device management server and other devices among the plurality of devices of the ; and sharing with each other information about the abnormality. in order to have multiple centralized managing equipments.

Natalini did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. (Paragraph [0042] The log may be organized and/or accessible in various ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors

prior to a failure, during a repair process and after a repair process. The data for the log may be, for example, periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved from a lower level member of said hierarchy. Alternatively or additionally, said data was previously retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Natalini and Dulberg did not disclose appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. Slemmer discloses appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. (FIG. 9 shows an alternative method of learning where the first device to have a change of state learns the interaction rule. The

logical operations begin at detect operation 902 where a first device detects its own change of state. In response to the change of state, the first device then begins monitoring for incoming state change messages at monitor operation 904. Subsequently, a second device receives a change of state at detect operation 906 and broadcasts the change of state message to all devices at broadcast operation 908. The broadcast is effectively a request that any device previously experiencing a state change add the second device to its subscriber list.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini in order to include appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device to provide in order to provide the unique function of the devices.

As per claim 5 Natalini, Terada, Slemmer, and Dulberg disclose all the limitations of claim 5 which is described above. Natalini also discloses wherein all of the plurality of devices are provided with the device monitoring function. i.e. monitoring subsystem 30 (Pg. 2 [0023]).

As per claim 6 Natalini, Terada, Slemmer, and Dulberg discloses all the limitations of claim 6 which is described above. Natalini also disclose wherein the device monitoring function comprises: a device detecting section for recognizing an existence of other devices connected to

the network (Pg. 3 paragraph [0035] The refrigerator 14 includes a refrigerated compartment 200, a compressor 202, a freezer compartment 204, an evaporator 206, temperature control dials 208, a compartment light 210, a door 212, and a latch 214, over various sensors 216-220 for monitoring and controlling the operations of the refrigerator. A current sensor 216 measures the current drawn by the refrigerator, one or more temperatures of the compartments and, as appropriate, ambient temperature, an open-door sensor 218 detects when the door 212 is not latched, on-off sensors 219 sense the on the and off states of the compressor 202, the evaporator 206 and the light 210 and a temperature control sensor 220 senses the user selected temperature settings. The existence of the device detecting section for recognizing devices connected to the network is implicit because the system detects activity of the component devices). A status information detecting section for detecting status information about the monitoring device (Pg. 3 paragraph [0035] an open-door sensor 218 detects when the door 212 is not latched, on-off sensors 219 sense the on the and off states of the compressor 202, the evaporator 206 and the light 210 and a temperature control sensor 220 senses the user selected temperature settings); a status information transmission section for transmitting status information about the monitoring device and the another device to at least one of a third device of the plurality of devices and the device management server (pg. 3 paragraph [0030] When the gateway 42 receives an alarm message over the network 10, the gateway immediately forwards the message to the remote center 50 via a telephone or cable line link 44. The gateway retains any received warning messages and transmits them to the remote center as part of a scheduled periodic transmission, for example, at the end of each week. ; and a status information receiving section for receiving status information at least form any other device of the plurality of devices. (pg. 3 paragraph

[0030] If, in the meantime, the gateway receives an alarm message the gateway sends the alarm message and any retained warning messages to the remote center. The gateway also periodically polls the monitoring subsystems and requests up-to-date functional, historical and /or statistical data, and includes the data in the transmissions to the remote center. The operations of the gateway are discussed in more detail below with reference to Fig.6). Natalini did not disclose a device management table creation section for creating a device management table for use in identifying a device to be monitored out of the recognized other devices; a device management table storage section for storing the created device management table. The general concept of a device management table creation section for creating a device management table for use in identifying a device to be monitored out of the recognized other devices; a device management table storage section for storing the created device management table is well known in the art as taught by Terada. Terada discloses a device management table creation section for creating a device management table for use in identifying a device to be monitored out of the recognized other devices (Col. 1 lines 31-35 Similarly, when the control apparatus controls each of the AV equipments connected to the system, an address or ID (Identification) for designating each AV equipment must be known in advance); a device management table storage section for storing the created device management table (Col. 1 lines 40 –45 In the AV equipment control system described in the aforementioned laid –open paten application, it is necessary for the control apparatus to know in advance correspondence between functions of respective AV equipments and the addresses or Ids of the AV equipments, by incorporating a table of correspondence. When the number of AV equipments is small, it is easy for the control apparatus to know or comprehend the addresses. IDs and functions utilizing a table). It would have been obvious to

one of ordinary skill in the art at the time of the invention to modify Natalini to include a device management table creation section for creating a device management table for use in identifying a device to be monitored out of the recognized other devices; a device management table storage section for storing the created device management table in order to control various electrical appliances or equipments. Managing respective addresses of the equipments is necessary.

Natalini did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. (Paragraph [0042] The log may be organized and/or accessible in various ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors prior to a failure, during a repair process and after a repair process. The data for the log may be, for example, periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined

that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved from a lower level member of said hierarchy. Alternatively or additionally, said data was previously retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Claims 11, 12 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Shimada (US 5,790,797) in view of Dulberg(US 2007/0100585 A1) further in view of Slemmer (US 6,889,207 B2).

As per claim 11 Shimada discloses a device monitoring method for a plurality of devices in a network, causing the plurality of devices to periodically monitor a state of each other and causing any of the plurality of devices which finds a change in the state of another device of the plurality of devices to: notifies at least one of anther device of the plurality of devices and a device management server about the change; and share information about the change with the plurality devices (Abstract In order to lighten the processing load on each monitoring device and enable each monitoring device to recognize the operating condition of a network as a whole, each monitoring device monitors operating conditions of transmission devices in a subnetwork

allocated thereto and reports the operating conditions to the other monitoring devices periodically or when there is a change in the operating condition). Shimada did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. (Paragraph [0042] The log may be organized and/or accessible in various ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors prior to a failure, during a repair process and after a repair process. The data for the log may be, for example, periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved from a lower level member of said hierarchy. Alternatively or additionally, said data was previously

retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Shimada and Dulberg did not disclose appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. Slemmer discloses appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. (FIG. 9 shows an alternative method of learning where the first device to have a change of state learns the interaction rule. The logical operations begin at detect operation 902 where a first device detects its own change of state. In response to the change of state, the first device then begins monitoring for incoming state change messages at monitor operation 904. Subsequently, a second device receives a change of state at detect operation 906 and broadcasts the change of state message to all devices at broadcast operation 908. The broadcast is effectively a request that any device previously experiencing a state change add the second device to its subscriber list.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada in order to

include appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device to provide in order to provide the unique function of the devices.

As per claim 12 Shimada discloses a monitoring method for a plurality of devices in a network, causing the plurality of devices to periodically monitor each other for abnormalities and causing any of the plurality of devices which finds an abnormality of another of the plurality of devices to: notify at least one of another device of the plurality of devices and a device management server about the abnormality ; and share information about the abnormality with the plurality of devices. (Abstract In order to lighten the processing load on each monitoring device and enable each monitoring device to recognize the operating condition of a network as a whole, each monitoring device monitors operating conditions of transmission devices in a subnetwork allocated thereto and reports the operating conditions to the other monitoring devices periodically or when there is a change in the operating condition). Shimada did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance from among the devices

on the network, creates a device management table, and distributes it to the other devices. (Paragraph [0042] The log may be organized and/or accessible in various ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors prior to a failure, during a repair process and after a repair process. The data for the log may be, for example, periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved from a lower level member of said hierarchy. Alternatively or additionally, said data was previously retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Shimada and Dulberg did not disclose appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. Slemmer discloses appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. (FIG. 9 shows an alternative method of learning where the first device to have a change of state learns the interaction rule. The logical operations begin at detect operation 902 where a first device detects its own change of state. In response to the change of state, the first device then begins monitoring for incoming state change messages at monitor operation 904. Subsequently, a second device receives a change of state at detect operation 906 and broadcasts the change of state message to all devices at broadcast operation 908. The broadcast is effectively a request that any device previously experiencing a state change add the second device to its subscriber list.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada in order to include appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device to provide in order to provide the unique function of the devices.

Claims 24 and 25 are rejected under 35 U.S.C. 103 (a) as being unpatentable over in view of Natalini (US 2002/0095269 A1) further in view of Dulberg (US 2007/0100585 A1) in view of Slemmer (US 6,889,207 B2).

As per claim 24 Natalini discloses a device comprising a device monitoring function for monitoring at least one other device among a plurality of devices in a network for changes in state; notifying another device among the plurality of devices in the network of the changes in state of the at least one other device; and sharing with the another device information about the changes in state. (Abstract In order to lighten the processing load on each monitoring device and enable each monitoring device to recognize the operating condition of a network as a whole, each monitoring device monitors operating conditions of transmission devices in a subnetwork allocated thereto and reports the operating conditions to the other monitoring devices periodically or when there is a change in the operating condition). Natalini did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices.

(Paragraph [0042] The log may be organized and/or accessible in various ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors prior to a failure, during a repair process and after a repair process. The data for the log may be, for example, periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved from a lower level member of said hierarchy. Alternatively or additionally, said data was previously retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Natalini and Dulberg did not disclose appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of

devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. Slemmer discloses appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. (FIG. 9 shows an alternative method of learning where the first device to have a change of state learns the interaction rule. The logical operations begin at detect operation 902 where a first device detects its own change of state. In response to the change of state, the first device then begins monitoring for incoming state change messages at monitor operation 904. Subsequently, a second device receives a change of state at detect operation 906 and broadcasts the change of state message to all devices at broadcast operation 908. The broadcast is effectively a request that any device previously experiencing a state change add the second device to its subscriber list.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini in order to include appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device to provide in order to provide the unique function of the devices.

As per claim 25 Natalini discloses a device comprising a device monitoring function for monitoring at least one other device among a plurality of devices in a network for an abnormality; notifying another device among the plurality of devices in the network of the abnormality of the at least one other device; and sharing with the another device information about the abnormality.. (Abstract In order to lighten the processing load on each monitoring device and enable each monitoring device to recognize the operating condition of a network as a whole, each monitoring device monitors operating conditions of transmission devices in a subnetwork allocated thereto and reports the operating conditions to the other monitoring devices periodically or when there is a change in the operating condition). Natalini did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. (Paragraph [0042] The log may be organized and/or accessible in various ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors prior to a failure, during a repair process and after a repair process. The data for the log may be, for example,

periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved from a lower level member of said hierarchy. Alternatively or additionally, said data was previously retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Natalini and Dulberg did not disclose appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. Slemmer discloses appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. (FIG. 9 shows an alternative method of learning where the first device to have a change of state learns the interaction rule. The logical operations begin at detect operation 902 where a first device detects its own

change of state. In response to the change of state, the first device then begins monitoring for incoming state change messages at monitor operation 904. Subsequently, a second device receives a change of state at detect operation 906 and broadcasts the change of state message to all devices at broadcast operation 908. The broadcast is effectively a request that any device previously experiencing a state change add the second device to its subscriber list.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini in order to include appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device to provide in order to provide the unique function of the devices.

Claim 13 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Shimada in view of Natalini (US 2002/0095269 A1) further in view of Dulberg (US 2007/0100585 a1) in view of Slemmer (US 6,889,207 B2).

As per claim 13 Shimada discloses all the limitations of claim 13 which is described above. Shimada did not disclose the information includes log information i.e. historical data about the monitored device. The general concept of the notification includes log information about the monitored device is well known in the art as taught by Natalini. Natalini discloses the information includes log information i.e. historical data about the monitored device (Pg. 3

[0030]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include the information includes log information about the monitored device in order to maintain certain information that is useful in the managing current operations. Natalini did not disclose wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. The general concept of wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices is well known in the art as taught by Dulberg. Dulberg discloses wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices. (Paragraph [0042] The log may be organized and/or accessible in various ways, for example as data fields (e.g., each representing a tracked variable), as events (e.g., to which a response includes a change in logging) and/or as state vectors (e.g., set of parameters that describe the state of the device being logged). The contents of the log (e.g., which data is logged and/or which events recorded) may be decided a priori and/or may be set by the events that occur and/or by the maintenance server. The log may include, for example, state vectors prior to a failure, during a repair process and after a repair process. The data for the log may be, for example, periodically acquired, acquired when it changes and/or more densely acquired before, during and/or after important events. In an exemplary embodiment of the invention, data is acquired at a high quality and some of the data is averaged or discarded when it is determined that no noteworthy event occurred and/or as memory fills up). (Paragraph [0132] In an exemplary embodiment of the invention, said data comprises device data. Optionally, said different components are arranged in a hierarchy and wherein said target device data is retrieved

from a lower level member of said hierarchy. Alternatively or additionally, said data was previously retrieved from said target device for reasons other than the need of said server). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini to include wherein a parent device selected in advance from among the devices on the network, creates a device management table, and distributes it to the other devices in order to have multiple centralized managing equipments.

Claim 14,15,16 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Shimada in view of Dulgberg (US 2007/0100585) further in view of Terada (US 6,167,046) in view of Slemmer (US 889,207 B2).

As per claim 14 Shimada and Dulberg discloses all the limitations of claim 14 which is described above. Shimada did not disclose each of the devices monitors at least one of a logically close and physically close device. The general concept of each of the devices monitors at least one of a logically close and physically close device is well known in the art as taught by Terada. Terada discloses each of the devices monitors at least one (Col. 9 lines 31-35 In one embodiment, the T&D capability of the consumer electronic devices are used to monitor and maintain a record of the activity of other devices within the home network during normal operation of these devices.) of a logically close e.g. (T.V. and Sony Play stations Col.4 lines 10-12) and physically close device (Col.6 lines 52-55 In accordance with the HAVi standard, there is no single controlling

device. Any device in the network that has been designed to do so can control other devices.) (Col. 4 lines 29-35 In one embodiment, some or all of the consumer electronic devices are capable of performing test and diagnosis (T&D) functions for other devices owned by the user that may potentially have a fault, and the potentially faulty devices also referred to herein as devices under test or DUTs are designed to operate with testing devices also referred to as T&D devices for purpose of diagnosis). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include each of the devices monitors at least one of a logically close and physically close device in order to control various electrical appliances or equipments. Managing respective addresses of the equipments is necessary.

As per claim 15 Shimada and Dulberg discloses all the limitations of claim 15 which is described above. Shimada did not disclose each of the devices monitors a functionally similar device. The general concept of each of the devices monitors a functionally similar device is well known in the art as taught by Terada. Terada discloses each of the devices monitors a functionally similar device (Col. 9 lines 31-35 In one embodiment, the T&D capability of the consumer electronic devices are used to monitor and maintain a record of the activity of other devices within the home network during normal operation of these devices.). (T.V. and Sony Play stations Col.4 lines 10-12) (Col.6 lines 52-55 In accordance with the HAVi standard, there is no single controlling device. Any device in the network that has been designed to do so can control other devices.) (Col. 4 lines 29-35 In one embodiment, some or all of the consumer

electronic devices are capable of performing test and diagnosis (T&D) functions for other devices owned by the user that may potentially have a fault, and the potentially faulty devices also referred to herein as devices under test or DUTs are designed to operate with testing devices also referred to as T&D devices for purpose of diagnosis). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include each of the devices monitors a functionally similar device in order to control various electrical appliances or equipments. Managing respective addresses of the equipments is necessary.

As per claim 16 Shimada and Delberg discloses all the limitations of claim 16 which is described above. Shimada did not disclose each of the devices monitors devices which differ by at least a certain time period of manufacture. The general concept of each of the devices monitors devices which differ by at least a certain time period of manufacture is well known in the art as taught by Terada. Terada discloses each of the devices monitors devices which differ by at least a certain time period of manufacture (Col. 10 lines 20-35). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include each of the devices monitors devices which differ by at least a certain time period of manufacture in order to control various electrical appliances or equipments. Managing respective addresses of the equipments is necessary.

Claim 7 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Natalini (US 2002/0095269 A1) in view of Slemmer (US 6,889,207 B2) in view of Terada (US 6,167,046)

further in view of Dulberg (US 2007/0100585 A1) further in view of Vuppula (US7,331,050 B2).

As per claim 7 Natalini,Terada, Dulgerg disclose all the limitations of claim 7 which is described above. Natalini did not disclose wherein the devices further comprise printers. The general concept of having the devices further comprises printers is well known in the art as taught by Vuppula. Vuppula discloses having the devices further comprises printers (Col. 1lines 27- 40 A server computer may include multiple processors and multiple devices directly connected to or included in the computer's housing. To keep such a computer running efficiently and without problems, monitoring software may be used to access information about the computer, its devices and the network it is connected to. Such monitoring software may be particularly helpful if the server computer serves web pages for Internet web sites. To keep a network running efficiently and without problems, monitoring software may be used to monitor the status of network devices such as routers, hubs, etc.; devices on the network such as printers and driver arrays; and computers on the network.). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini invention to include the devices further comprises printers in order to print out a hard copy of the status information, in reference to personal files.

Claim 26 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Natalini (US 2002/0095269 A1) in view of Terada (US 6,167,046) further in view of Dulberg (US

2007/0100585 A1) further in view of Krzyanowski (US 6,792,323 B2) further in view of Slemmer (US 6,889,207 B2)

As per claim 26 Natalini disclose all the limitations of claim 26 which is described above. Natalini did not disclose wherein the device further comprises a printer. The general concept of having the device further comprise a printer is well known in the art as taught by Krzyanowski. Krzyanowski discloses having the device further comprises a printer (Col. 9 lines 19-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini invention to include the device further comprise a printer in order to print out a hard copy of the status information, in reference to personal files.

Natalini and Dulberg did not disclose appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. Slemmer discloses appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device. (FIG. 9 shows an alternative method of learning where the first device to have a change of state learns the interaction rule. The logical operations begin at detect operation 902 where a first device detects its own change of state. In response to the change of state, the first device then begins

monitoring for incoming state change messages at monitor operation 904. Subsequently, a second device receives a change of state at detect operation 906 and broadcasts the change of state message to all devices at broadcast operation 908. The broadcast is effectively a request that any device previously experiencing a state change add the second device to its subscriber list.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Natalini in order to include appointing a parent device by: detecting whether one of the plurality of devices has already been appointed the parent device, the one of the plurality of devices having started up first on the network; and if no parent device is detected in the detecting step, becoming the parent device to provide in order to provide the unique function of the devices.

Claims 17, 18 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Shimada (US 5,790,797) in view Dulberg (US 2007/0100585) further in view Slemmer (US 6,889,207 B2) in view of Smyers (US 6,430,629 B1).

As per claim 17 Shimada and Dulberg discloses all the limitations of claim 17 which is described above. Shimada did not disclose wherein each of the devices determines a device to be monitored according to a device management table created by a parent device. The general concept of wherein each of the devices determines a device to be monitored according to a

device management table created by a parent device is well known in the art as taught by Smyers. Smyers discloses wherein each of the devices determines a device to be monitored according to a device management table created by a parent device (Col. 2 lines 48-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to have wherein each of the devices determines a device to be monitored according to a device management table created by a parent device in order for a user who wishes to known the history of changes of certain devices over a period of time.

As per claim 18 Shimada, Dulberg and Smyers discloses all the limitations of claim 18 which is described above. Smyers also discloses wherein the device management table is created by the parent device according to device management method properties acquired from the device management server (Col. 2 lines 48-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include wherein the device management table is created by the parent device according to device management method properties acquired from the device management server in order for a user who wishes to known the history of changes of certain devices over a period of time.

Claims 19, 20, 21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Shimada (US 5,790,797) in view of Dulberg (US 2007/0100585 A1) further in view of Smyers (US 6,430,629 B1) further in view of Gubbi (US 6,434,113B1) further in view of Slemmer (US 6,889,207 B2).

As per claim 19 Shimada, Dulberg, and Smyers discloses all the limitations of claim 19 which is described above. Shimada did not disclose the devices which starts up first from among the plurality of devices in the network becomes the parent device. The general concept of having the devices which starts up first from among the plurality of devices in the network becomes the parent device is well known in the art as taught by Gubbi. Gubbi discloses the devices which starts up first from among the plurality of devices in the network becomes the parent device (Abstract lines 17-20). It would have been obvious to one of ordinary skill in at the time of the invention to modify Shimada to include the devices which starts up first from among the plurality of devices in the network becomes the parent device in order to provide a network node to configure control operations in a wireless computer network and to automatically hand over network master operations to an alternate network master device upon detecting an operational failure of the network node.

As per claim 20, Shimada, Dulberg, and Smyers disclose all the limitations of claim 20 which is described above. Shimada did not disclose wherein if the parent device experiences a shut down and stops operating, a device, which detects the shut down functions as a new parent device. The general concept of wherein if when the parent device experiences a shut down and stops operating, a device, which detects the shut down functions as a new parent device is well known in the art as taught by Gubbi. Gubbi discloses when the parent device experiences a shut down and stops operating, a device, which detects shut down functions as a new parent device (Abstract lines 1-10). It would have been obvious to one of ordinary skill in at the time of the invention to modify Shimada to include wherein if the parent device experiences a shut down

and stops operating, a device, which detects the shut down functions as a new parent device in order to provide a network node to configure control operations in a wireless computer network and to automatically hand over network master operations to an alternate network master device upon detecting an operational failure of the network node.

As per claim 21, Shimada, Dulberg, and Smyers disclose all the limitations of claim 21 which is described above. Shimada did not disclose wherein if the parent device shuts down, the first device that receives a shut-down notice from the parent device functions as a new parent. The general concept of if the parent device shuts down, the first device that receives a shut-down notice from the parent device functions as a new parent is well known in the art as taught by Gubbi. Gubbi discloses when the parent device shuts down, the first device that receives a shut-down notice from the parent device functions as a new parent (Abstract lines 1-10). It would have been obvious to one of ordinary skill in at the time of the invention to modify Shimada to include if the parent device shuts down, the first device that receives a shut-down notice from the parent device functions as a new parent in order to provide a network node to configure control operations in a wireless computer network and to automatically hand over network master operations to an alternate network master device upon detecting an operational failure of the network node.

Claim 22 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Shimada (US 5,790,797) in view of Dulberg (US 2007/0100585 A1) Smyers (US 6,430,629 B1) further in

view of Gubbi (US 6,434,113B1) further in view of Moran (US 2002/0177448 A1) further in view of Slemmer (US 6,889,207 B2).

As per claim 22 Shimada, Dulberg, Smyers, Gubbi disclose all the limitations of claim 21 which is described above. Shimada did not disclose an XML protocol is used as a data description format for a communications section among the devices and a communications section between the device management server. The general concept of having an XML protocol is used as a data description format for a communications section among the devices and a communications section between the device management server is well known in the art as disclose by Moran. Moran discloses an XML protocol is used as a data description format for a communications section among the devices and a communications section between the device management server (Pg. 2 paragraph [0025]). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada to include an XML protocol is used as a data description format for a communications section among the devices and a communications section between the device management server in order to provide a bias-free means for measuring the performance of various service providers in the wireless communications industry.

Claim 23 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Shimada (US 5,790,797) in view of Dulberg (US 2007/0100585 A1) further in view of Smyers (US 6,430,629 B1) further in view of Krzyanowski (US 6,792,323 B2) in view of Slemmer (US 6,889,207 B2).

As per claim 23, Shimada, Dulberg, and Smyers disclose all the limitations of claim 23 which is described above. Shimada did not disclose wherein the devices further comprise printers. The general concept of having the devices further comprises printers is well known in the art as taught by Krzyanowski. Krzyanowski discloses having the devices further comprises printers (Col. 9 lines 19-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada invention to include the devices further comprises printers in order to print out a hard copy of the status information, in reference to personal files.

Response to Arguments

Applicant's arguments filed on 11/3/2008 have been fully considered but they are deemed moot in view of the new grounds of rejections.

Conclusion

Arguments are deemed moot in view of the new grounds of rejection necessitated by the amendment.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashley D. Turner whose telephone number is 571-270-1603. The examiner can normally be reached on Monday thru Friday 7:30a.m.- 5:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ashley D Turner
Examiner
Art Unit 2454

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2454